

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A dielectric resonator comprising:
a dielectric resonance element; and
a protrusion portion disposed on a bottom surface of the dielectric resonance element,

wherein a side face at an outer periphery of the protrusion portion is tilted such that an area of an upper surface of the protrusion portion adjacent the bottom surface of the dielectric resonance element is larger than an area of a lower surface of the protrusion portion,

wherein the lower surface of the protrusion portion is fixed to a mounting substrate, and

wherein an electromagnetic field used in the dielectric resonance element is in the TE₀₁ δ mode.

2. (Previously presented) The dielectric resonator as claimed in claim 1, wherein the entire side face at the outer periphery of the protrusion portion is tilted.

3. (Previously presented) The dielectric resonator as claimed in claim 1, wherein an area of the bottom surface of the dielectric resonance element is larger than the area on the upper surface of the protrusion portion.

4. (Previously presented) A filter comprising a plurality of dielectric resonators as claimed in claim 1.

5. (Original) A duplexer comprising two filters as claimed in claim 4.

6. (Previously presented) An oscillator comprising a dielectric resonator as claimed in claim 1.

7. (Previously presented) A communication device comprising a dielectric resonator as claimed in claim 1.

8. (Previously presented) The dielectric resonator as claimed in claim 1, wherein the protrusion portion is integrally molded with the dielectric resonance element.

9. (Previously presented) The dielectric resonator as claimed in claim 2, wherein an area of the bottom surface of the dielectric resonance element is larger than the area on the upper surface of the protrusion portion.

10. (Previously presented) A communication device comprising a filter as claimed in claim 4.

11. (Previously presented) A communication device comprising a duplexer as claimed in claim 5.

12. (Previously presented) A communication device comprising an oscillator as claimed in claim 6.